

Sequence Listing

<110> Baker, Kevin
 Botstein, David
 Eaton, Dan
 Ferrara, Napoleone
 Filvaroff, Ellen
 Gerritsen, Mary
 Goddard, Audrey
 Godowski, Paul
 Grimaldi, Christopher
 Gurney, Austin
 Hillan, Kenneth
 Kljavin, Ivar
 Napier, Mary
 Roy, Margaret
 Tumas, Daniel
 Wood, William

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<213> Homo Sapien

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35 40 45
Asp Asp Asp Asp Asp Glu Asp Asn Ser Leu Phe Pro Thr Arg Glu
50 55 60
Pro Arg Ser His Phe Phe Pro Phe Asp Leu Phe Pro Met Cys Pro
65 70 75
Phe Gly Cys Gln Cys Tyr Ser Arg Val Val His Cys Ser Asp Leu
80 85 90
Gly Leu Thr Ser Val Pro Thr Asn Ile Pro Phe Asp Thr Arg Met
95 100 105
Leu Asp Leu Gln Asn Asn Lys Ile Lys Glu Ile Lys Glu Asn Asp
110 115 120
Phe Lys Gly Leu Thr Ser Leu Tyr Gly Leu Ile Leu Asn Asn Asn
125 130 135
Lys Leu Thr Lys Ile His Pro Lys Ala Phe Leu Thr Thr Lys Lys
140 145 150
Leu Arg Arg Leu Tyr Leu Ser His Asn Gln Leu Ser Glu Ile Pro
155 160 165
Leu Asn Leu Pro Lys Ser Leu Ala Glu Leu Arg Ile His Glu Asn
170 175 180
Lys Val Lys Lys Ile Gln Lys Asp Thr Phe Lys Gly Met Asn Ala
185 190 195
Leu His Val Leu Glu Met Ser Ala Asn Pro Leu Asp Asn Asn Gly
200 205 210

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Ile	Ala	Glu	Ala	Lys	Leu	Thr	Ser	Val	Pro	Lys	Gly	Leu	Pro	Pro
				230					235					240
Thr	Leu	Leu	Glu	Leu	His	Leu	Asp	Tyr	Asn	Lys	Ile	Ser	Thr	Val
				245					250					255
Glu	Leu	Glu	Asp	Phe	Lys	Arg	Tyr	Lys	Glu	Leu	Gln	Arg	Leu	Gly
				260					265					270
Leu	Gly	Asn	Asn	Lys	Ile	Thr	Asp	Ile	Glu	Asn	Gly	Ser	Leu	Ala
				275					280					285
Asn	Ile	Pro	Arg	Val	Arg	Glu	Ile	His	Leu	Glu	Asn	Asn	Lys	Leu
				290					295					300
Lys	Lys	Ile	Pro	Ser	Gly	Leu	Pro	Glu	Leu	Lys	Tyr	Leu	Gln	Ile
				305					310					315
Ile	Phe	Leu	His	Ser	Asn	Ser	Ile	Ala	Arg	Val	Gly	Val	Asn	Asp
				320					325					330
Phe	Cys	Pro	Thr	Val	Pro	Lys	Met	Lys	Lys	Ser	Leu	Tyr	Ser	Ala
				335					340					345
Ile	Ser	Leu	Phe	Asn	Asn	Pro	Val	Lys	Tyr	Trp	Glu	Met	Gln	Pro
				350					355					360
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 <211> 24
 <212> DNA
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<220>
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<400> 4
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<213> Homo Sapien

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35 40 45
Arg Gly Ala Ala Gly Cys Thr Phe Gly Gly Lys Val Tyr Ala Leu
50 55 60
Asp Glu Thr Trp His Pro Asp Leu Gly Gln Pro Phe Gly Val Met
65 70 75

Arg Cys Val Leu Cys Ala Cys Glu Ala Pro Gln Trp Gly Arg Arg	80	85	90
Thr Arg Gly Pro Gly Arg Val Ser Cys Lys Asn Ile Lys Pro Glu	95	100	105
Cys Pro Thr Pro Ala Cys Gly Gln Pro Arg Gln Leu Pro Gly His	110	115	120
Cys Cys Gln Thr Cys Pro Gln Glu Arg Ser Ser Ser Glu Arg Gln	125	130	135
Pro Ser Gly Leu Ser Phe Glu Tyr Pro Arg Asp Pro Glu His Arg	140	145	150
Ser Tyr Ser Asp Arg Gly Glu Pro Gly Ala Glu Glu Arg Ala Arg	155	160	165
Gly Asp Gly His Thr Asp Phe Val Ala Leu Leu Thr Gly Pro Arg	170	175	180
Ser Gln Ala Val Ala Arg Ala Arg Val Ser Leu Leu Arg Ser Ser	185	190	195
Leu Arg Phe Ser Ile Ser Tyr Arg Arg Leu Asp Arg Pro Thr Arg	200	205	210
Ile Arg Phe Ser Asp Ser Asn Gly Ser Val Leu Phe Glu His Pro	215	220	225
Ala Ala Pro Thr Gln Asp Gly Leu Val Cys Gly Val Trp Arg Ala	230	235	240
Val Pro Arg Leu Ser Leu Arg Leu Leu Arg Ala Glu Gln Leu His	245	250	255
Val Ala Leu Val Thr Leu Thr His Pro Ser Gly Glu Val Trp Gly	260	265	270
Pro Leu Ile Arg His Arg Ala Leu Ala Ala Glu Thr Phe Ser Ala	275	280	285
Ile Leu Thr Leu Glu Gly Pro Pro Gln Gln Gly Val Gly Gly Ile	290	295	300
Thr Leu Leu Thr Leu Ser Asp Thr Glu Asp Ser Leu His Phe Leu	305	310	315
Leu Leu Phe Arg Gly Leu Leu Glu Pro Arg Ser Gly Gly Leu Thr	320	325	330
Gln Val Pro Leu Arg Leu Gln Ile Leu His Gln Gly Gln Leu Leu	335	340	345
Arg Glu Leu Gln Ala Asn Val Ser Ala Gln Glu Pro Gly Phe Ala	350	355	360
Glu Val Leu Pro Asn Leu Thr Val Gln Glu Met Asp Trp Leu Val			

365	370	375
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380	385	390
Leu Arg Ile Ser Gly His Ile Ala Ala Arg Lys Ser Cys Asp Val		
395	400	405
Leu Gln Ser Val Leu Cys Gly Ala Asp Ala Leu Ile Pro Val Gln		
410	415	420
Thr Gly Ala Ala Gly Ser Ala Ser Leu Thr Leu Leu Gly Asn Gly		
425	430	435
Ser Leu Ile Tyr Gln Val Gln Val Val Gly Thr Ser Ser Glu Val		
440	445	450
Val Ala Met Thr Leu Glu Thr Lys Pro Gln Arg Arg Asp Gln Arg		
455	460	465
Thr Val Leu Cys His Met Ala Gly Leu Gln Pro Gly Gly His Thr		
470	475	480
Ala Val Gly Ile Cys Pro Gly Leu Gly Ala Arg Gly Ala His Met		
485	490	495
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Pro Asp Gly Glu Leu Arg Gly His Val Ala Ala Leu Pro Tyr Cys		
515	520	525
Gly His Ser Ala Arg His Asp Thr Leu Pro Val Pro Leu Ala Gly		
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Ala Leu Val Leu Pro Pro Val Lys Ser Gln Ala Ala Gly His Ala		
545	550	555
Trp Leu Ser Leu Asp Thr His Cys His Leu His Tyr Glu Val Leu		
560	565	570
Leu Ala Gly Leu Gly Gly Ser Glu Gln Gly Thr Val Thr Ala His		
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Leu Leu Gly Pro Pro Gly Thr Pro Gly Pro Arg Arg Leu Leu Lys		
590	595	600
Gly Phe Tyr Gly Ser Glu Ala Gln Gly Val Val Lys Asp Leu Glu		
605	610	615
Pro Glu Leu Leu Arg His Leu Ala Lys Gly Met Ala Ser Leu Met		
620	625	630
Ile Thr Thr Lys Gly Ser Pro Arg Gly Glu Leu Arg Gly Gln Val		
635	640	645
His Ile Ala Asn Gln Cys Glu Val Gly Gly Leu Arg Leu Glu Ala		
650	655	660

Ala Gly Ala Glu Gly Val Arg Ala Leu Gly Ala Pro Asp Thr Ala	665	670	675
Ser Ala Ala Pro Pro Val Val Pro Gly Leu Pro Ala Leu Ala Pro	680	685	690
Ala Lys Pro Gly Gly Pro Gly Arg Pro Arg Asp Pro Asn Thr Cys	695	700	705
Phe Phe Glu Gly Gln Gln Arg Pro His Gly Ala Arg Trp Ala Pro	710	715	720
Asn Tyr Asp Pro Leu Cys Ser Leu Cys Thr Cys Gln Arg Arg Thr	725	730	735
Val Ile Cys Asp Pro Val Val Cys Pro Pro Pro Ser Cys Pro His	740	745	750
Pro Val Gln Ala Pro Asp Gln Cys Cys Pro Val Cys Pro Glu Lys	755	760	765
Gln Asp Val Arg Asp Leu Pro Gly Leu Pro Arg Ser Arg Asp Pro	770	775	780
Gly Glu Gly Cys Tyr Phe Asp Gly Asp Arg Ser Trp Arg Ala Ala	785	790	795
Gly Thr Arg Trp His Pro Val Val Pro Pro Phe Gly Leu Ile Lys	800	805	810
Cys Ala Val Cys Thr Cys Lys Gly Gly Thr Gly Glu Val His Cys	815	820	825
Glu Lys Val Gln Cys Pro Arg Leu Ala Cys Ala Gln Pro Val Arg	830	835	840
Val Asn Pro Thr Asp Cys Cys Lys Gln Cys Pro Val Gly Ser Gly	845	850	855
Ala His Pro Gln Leu Gly Asp Pro Met Gln Ala Asp Gly Pro Arg	860	865	870
Gly Cys Arg Phe Ala Gly Gln Trp Phe Pro Glu Ser Gln Ser Trp	875	880	885
His Pro Ser Val Pro Pro Phe Gly Glu Met Ser Cys Ile Thr Cys	890	895	900
Arg Cys Gly Ala Gly Val Pro His Cys Glu Arg Asp Asp Cys Ser	905	910	915
Leu Pro Leu Ser Cys Gly Ser Gly Lys Glu Ser Arg Cys Cys Ser	920	925	930
Arg Cys Thr Ala His Arg Arg Pro Pro Glu Thr Arg Thr Asp Pro	935	940	945
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<220>
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<210> 10
 <211> 36
 <212> DNA
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<210> 11
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<400> 11
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<210> 12
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<220>
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<400> 12
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<210> 13

<211> 22
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<220>
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<400> 13
gcagggtgct caaacaggac ac 22

<210> 14
<211> 3231
<212> DNA
<213> Homo Sapien

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aaaacagggc agaaagttgt agaaatgaaa tgggatcaag tggaggtgat 700
cccagatatt gcctgtggga atgccagttc taacagctct gcgggtggcc 750
gcctgggtatc ctttgaagtg ccacagaaca cctcagtcaa gattcggcaa 800
gatgccactg cctcactgat tttgctctgg aaggtcacgg ccacaggatt 850
ccaacagtgc tccctcatag atggacgaag tgtgaccccc cttcaggctt 900
cagggggact ggtcctcctg gaggagatgc tcgccttggg gaataatcac 950
tttattgggt ttgtgaatga ttctgtgact aagtctattg tggctttgcg 1000
cttaactctg gtggtgaagg tcagcacctg tgtgcggggg gagagtcacg 1050

caaatgactt ggagtgttca ggaaaaggaa aatgcaccac gaagccgtca 1100
 gaggcaactt tttcctgtac ctgtgaggag cagtacgtgg gtactttctg 1150
 tgaagaatac gatgcttgcc agaggaaacc ttgccaaaac aacgcgagct 1200
 gtattgatgc aaatgaaaag caagatggga gcaatttcac ctgtgtttgc 1250
 cttcctgggtt atactggaga gctttgccag tccaagattg attactgcat 1300
 cctagaccca tgcagaaatg gagcaacatg catttccagt ctgagtggat 1350
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 cctgtgcccc gcttattgac ttctgtgccc tcagcccctg tgctcatggc 1550
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 ccatggcctc tactgtgagg aggaatataa tgagtgcctc tccgctccat 1650
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 ccggcatgcc aggtttggaa agaaatcccg gcctgcaatg tatgatgtga 2250
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 ctgattaataa ctaaagattt gtaatctttt tttggattat ttttcaaaaa 2350
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tgtgaaacct atagacgatg ttttaagtga ccttcagctc tctaaactgt 2550
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 ttctttaaaa agtcaagggt tctatattgt gagtaaatta aatttacatt 3050
 tgagttgttt gttgctaaga ggtagtaaat gtaagagagt actggttcct 3100
 tcagtagtga gtatttctca tagtgcagct ttatttatct ccaggatgtt 3150
 tttgtggctg tatttgattg atatgtgctt cttctgatcc ttgctaattt 3200
 ccaaccatat tgaataaatg tgatcaagtc a 3231

<210> 15
 <211> 737
 <212> PRT
 <213> Homo Sapien

<400> 15
 Met Gln Pro Arg Arg Ala Gln Ala Pro Gly Ala Gln Leu Leu Pro
 1 5 10 15
 Ala Leu Ala Leu Leu Leu Leu Leu Leu Gly Ala Gly Pro Arg Gly
 20 25 30
 Ser Ser Leu Ala Asn Pro Val Pro Ala Ala Pro Leu Ser Ala Pro
 35 40 45
 Gly Pro Cys Ala Ala Gln Pro Cys Arg Asn Gly Gly Val Cys Thr
 50 55 60
 Ser Arg Pro Glu Pro Asp Pro Gln His Pro Ala Pro Ala Gly Glu
 65 70 75
 Pro Gly Tyr Ser Cys Thr Cys Pro Ala Gly Ile Ser Gly Ala Asn
 80 85 90
 Cys Gln Leu Val Ala Asp Pro Cys Ala Ser Asn Pro Cys His His
 95 100 105
 Gly Asn Cys Ser Ser Ser Ser Ser Ser Ser Ser Asp Gly Tyr Leu

Thr Cys Ile Ser	Ser Leu Ser Gly Phe	Thr Cys Gln Cys Pro	Glu
410	415		420
Gly Tyr Phe Gly	Ser Ala Cys Glu Glu	Lys Val Asp Pro Cys	Ala
425	430		435
Ser Ser Pro Cys	Gln Asn Asn Gly Thr	Cys Tyr Val Asp Gly	Val
440	445		450
His Phe Thr Cys	Asn Cys Ser Pro Gly	Phe Thr Gly Pro Thr	Cys
455	460		465
Ala Gln Leu Ile	Asp Phe Cys Ala Leu	Ser Pro Cys Ala His	Gly
470	475		480
Thr Cys Arg Ser	Val Gly Thr Ser Tyr	Lys Cys Leu Cys Asp	Pro
485	490		495
Gly Tyr His Gly	Leu Tyr Cys Glu Glu	Glu Tyr Asn Glu Cys	Leu
500	505		510
Ser Ala Pro Cys	Leu Asn Ala Ala Thr	Cys Arg Asp Leu Val	Asn
515	520		525
Gly Tyr Glu Cys	Val Cys Leu Ala Glu	Tyr Lys Gly Thr His	Cys
530	535		540
Glu Leu Tyr Lys	Asp Pro Cys Ala Asn	Val Ser Cys Leu Asn	Gly
545	550		555
Ala Thr Cys Asp	Ser Asp Gly Leu Asn	Gly Thr Cys Ile Cys	Ala
560	565		570
Pro Gly Phe Thr	Gly Glu Glu Cys Asp	Ile Asp Ile Asn Glu	Cys
575	580		585
Asp Ser Asn Pro	Cys His His Gly Gly	Ser Cys Leu Asp Gln	Pro
590	595		600
Asn Gly Tyr Asn	Cys His Cys Pro His	Gly Trp Val Gly Ala	Asn
605	610		615
Cys Glu Ile His	Leu Gln Trp Lys Ser	Gly His Met Ala Glu	Ser
620	625		630
Leu Thr Asn Met	Pro Arg His Ser Leu	Tyr Ile Ile Ile Gly	Ala
635	640		645
Leu Cys Val Ala	Phe Ile Leu Met Leu	Ile Ile Leu Ile Val	Gly
650	655		660
Ile Cys Arg Ile	Ser Arg Ile Glu Tyr	Gln Gly Ser Ser Arg	Pro
665	670		675
Ala Tyr Glu Glu	Phe Tyr Asn Cys Arg	Ser Ile Asp Ser Glu	Phe
680	685		690
Ser Asn Ala Ile	Ala Ser Ile Arg His	Ala Arg Phe Gly Lys	Lys

695	700	705
Ser Arg Pro Ala Met Tyr Asp Val Ser Pro Ile Ala Tyr Glu Asp		
710	715	720
Tyr Ser Pro Asp Asp Lys Pro Leu Val Thr Leu Ile Lys Thr Lys		
725	730	735

Asp Leu

<210> 16
 <211> 43
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic Oligonucleotide Probe

<400> 16
 tgtaaaacga cggccagtta aatagacctg caattattaa tct 43

<210> 17
 <211> 41
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic Oligonucleotide Probe

<400> 17
 caggaaacag ctatgaccac ctgcacacct gcaaattccat t 41

<210> 18
 <211> 508
 <212> DNA
 <213> Homo Sapien

<400> 18
 ctctggaagg tcacggccac aggattccaa cagtgtctcc tcatagatgg 50
 acgaaagtgt gacccccctt tcaggctttc agggggactg gtcctcctgg 100
 aggagatgct cgccttgggg aataatcact ttattggttt tgtgaatgat 150
 tctgtgacta agtctattgt ggctttgcgc ttaactctgg tgggtgaaggt 200
 cagcacctgt gtgccggggg agagtcacgc aaatgacttg gagtgttcag 250
 gaaaaggaaa atgcaccacg aagccgtcag aggcaacttt ttcctgtacc 300
 tgtgaggagc agtacgtggg tactttctgt gaagaatacg atgcttgcca 350
 gaggaaacct tgccaaaaca acgcgagctg tattgatgca aatgaaaagc 400
 aagatgggag caatttcacc tgtgtttgcc ttcctgggta tactggagag 450
 ctttgccaac cgaactgaga ttggagcgaa cgacctacac cgaactgaga 500

taggggag 508

<210> 19
<211> 508
<212> DNA
<213> Homo Sapien

<400> 19
ctctggaagg tcacggccac aggattccaa cagtgtccc tcatagatgg 50
acgaaagtgt gacccccctt tcaggctttc agggggactg gtcctcctgg 100
aggagatgct cgccttgggg aataatcact ttattggttt tgtgaatgat 150
tctgtgacta agtctattgt ggctttgcgc ttaactctgg tggatgaagg 200
cagcacctgt gtgccggggg agagtcacgc aaatgacttg gagtggtcag 250
gaaaaggaaa atgcaccacg aagccgtcag aggcaacttt ttcctgtacc 300
tgtgaggagc agtacgtggg tactttctgt gaagaatacg atgcttgcca 350
gaggaaacct tgccaaaaca acgcgagctg tattgatgca aatgaaaagc 400
aagatgggag caatttcacc tgtgtttgcc ttcctgggta tactggagag 450
ctttgccaac cgaactgaga ttggagcgaa cgacctacac cgaactgaga 500

taggggag 508

<210> 20
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 20
ctctggaagg tcacggccac agg 23

<210> 21
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 21
ctcagttcgg ttggcaaagc tctc 24

<210> 22
<211> 69
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 22

cagtgtctccc tcatagatgg acgaaagtgt gacccccctt tcaggcgaga 50
gctttgccaa ccgaactga 69

<210> 23

<211> 1520

<212> DNA

<213> Homo Sapien

<400> 23

gctgagtctg ctgctectgc tgctgctgct ccagcctgta acctgtgcct 50
acaccacgcc agggcccccc agagcctca ccacgctggg cggccccaga 100
gcccacacca tgccgggcac ctacgtccc tcgaccacac tcagtagtcc 150
cagcaccag ggctgcaag agcaggcacg ggccctgatg cgggacttcc 200
cgctcgtgga cggccacaac gacctgcccc tggctctaag gcaggtttac 250
cagaaagggc tacaggatgt taacctgcgc aatttcagct acggccagac 300
cagcctggac aggcttagag atggcctcgt gggcgcccag ttctggtcag 350
cctatgtgcc atgccagacc caggaccggg atgccctgcg cctcaccctg 400
gagcagattg acctcatacg ccgcatgtgt gcctcctatt ctgagctgga 450
gcttgtgacc tcggctaaag ctctgaacga cactcagaaa ttggcctgcc 500
tcacgggtgt agaggggtggc cactcgtctg acaatagcct ctccatctta 550
cgtaccttct acatgctggg agtgcgctac ctgacgctca cccacacctg 600
caacacaccc tgggcagaga gctccgctaa gggcgctccac tccttctaca 650
acaacatcag cgggctgact gactttgggt agaagggtggg ggcagaaatg 700
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agtaatacag tgcaaccat cagccaatgt gtccactgtg gcagatcact 950
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atacccggtc ctgatagagg agttgctgag tcgtggctgg agtgaggaag 1100
agcttcaggg tgtccttcgt ggaaacctgc tgcgggtctt cagacaagtg 1150

gaaaagggtac aggaagaaaa caaatggcaa agcccccttgg aggacaagtt 1200
cccggatgag cagctgagca gttcctgcca ctccgacctc tcacgtctgc 1250
gtcagagaca gagtctgact tcaggccagg aactcactga gattcccata 1300
cactggacag ccaagttacc agccaagtgg tcagtctcag agtcctcccc 1350
ccacatggcc ccagtccttg cagttgtggc caccttccca gtccttattc 1400
tgtggctctg atgacccagt tagtcctgcc agatgtcact gtagcaagcc 1450
acagacaccc cacaaagttc ccctgttgtg caggcacaaa tatttctga 1500
aataaatggt ttggacatag 1520

<210> 24
<211> 433
<212> PRT
<213> Homo Sapien

<400> 24
Met Pro Gly Thr Tyr Ala Pro Ser Thr Thr Leu Ser Ser Pro Ser
1 5 10 15
Thr Gln Gly Leu Gln Glu Gln Ala Arg Ala Leu Met Arg Asp Phe
20 25 30
Pro Leu Val Asp Gly His Asn Asp Leu Pro Leu Val Leu Arg Gln
35 40 45
Val Tyr Gln Lys Gly Leu Gln Asp Val Asn Leu Arg Asn Phe Ser
50 55 60
Tyr Gly Gln Thr Ser Leu Asp Arg Leu Arg Asp Gly Leu Val Gly
65 70 75
Ala Gln Phe Trp Ser Ala Tyr Val Pro Cys Gln Thr Gln Asp Arg
80 85 90
Asp Ala Leu Arg Leu Thr Leu Glu Gln Ile Asp Leu Ile Arg Arg
95 100 105
Met Cys Ala Ser Tyr Ser Glu Leu Glu Leu Val Thr Ser Ala Lys
110 115 120
Ala Leu Asn Asp Thr Gln Lys Leu Ala Cys Leu Ile Gly Val Glu
125 130 135
Gly Gly His Ser Leu Asp Asn Ser Leu Ser Ile Leu Arg Thr Phe
140 145 150
Tyr Met Leu Gly Val Arg Tyr Leu Thr Leu Thr His Thr Cys Asn
155 160 165
Thr Pro Trp Ala Glu Ser Ser Ala Lys Gly Val His Ser Phe Tyr
170 175 180

Asn	Asn	Ile	Ser	Gly	Leu	Thr	Asp	Phe	Gly	Glu	Lys	Val	Val	Ala	185	190	195
Glu	Met	Asn	Arg	Leu	Gly	Met	Met	Val	Asp	Leu	Ser	His	Val	Ser	200	205	210
Asp	Ala	Val	Ala	Arg	Arg	Ala	Leu	Glu	Val	Ser	Gln	Ala	Pro	Val	215	220	225
Ile	Phe	Ser	His	Ser	Ala	Ala	Arg	Gly	Val	Cys	Asn	Ser	Ala	Arg	230	235	240
Asn	Val	Pro	Asp	Asp	Ile	Leu	Gln	Leu	Leu	Lys	Lys	Asn	Gly	Gly	245	250	255
Val	Val	Met	Val	Ser	Leu	Ser	Met	Gly	Val	Ile	Gln	Cys	Asn	Pro	260	265	270
Ser	Ala	Asn	Val	Ser	Thr	Val	Ala	Asp	His	Phe	Asp	His	Ile	Lys	275	280	285
Ala	Val	Ile	Gly	Ser	Lys	Phe	Ile	Gly	Ile	Gly	Gly	Asp	Tyr	Asp	290	295	300
Gly	Ala	Gly	Lys	Phe	Pro	Gln	Gly	Leu	Glu	Asp	Val	Ser	Thr	Tyr	305	310	315
Pro	Val	Leu	Ile	Glu	Glu	Leu	Leu	Ser	Arg	Gly	Trp	Ser	Glu	Glu	320	325	330
Glu	Leu	Gln	Gly	Val	Leu	Arg	Gly	Asn	Leu	Leu	Arg	Val	Phe	Arg	335	340	345
Gln	Val	Glu	Lys	Val	Gln	Glu	Glu	Asn	Lys	Trp	Gln	Ser	Pro	Leu	350	355	360
Glu	Asp	Lys	Phe	Pro	Asp	Glu	Gln	Leu	Ser	Ser	Ser	Cys	His	Ser	365	370	375
Asp	Leu	Ser	Arg	Leu	Arg	Gln	Arg	Gln	Ser	Leu	Thr	Ser	Gly	Gln	380	385	390
Glu	Leu	Thr	Glu	Ile	Pro	Ile	His	Trp	Thr	Ala	Lys	Leu	Pro	Ala	395	400	405
Lys	Trp	Ser	Val	Ser	Glu	Ser	Ser	Pro	His	Met	Ala	Pro	Val	Leu	410	415	420
Ala	Val	Val	Ala	Thr	Phe	Pro	Val	Leu	Ile	Leu	Trp	Leu			425	430	

<210> 25

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 25

agttctgggc agcctatgtg cc 22

<210> 26

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 26

cgtgatgggt tctttgtcca tggg 24

<210> 27

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 27

ctccaccaat cccgatgaac ttgg 24

<210> 28

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 28

gagcagattg acctcatagc ccgcatgtgt gcctcctatt ctgagctgga 50

<210> 29

<211> 1416

<212> DNA

<213> Homo Sapien

<400> 29

aaaacctata aatattccgg attattcata ccgtcccacc atcgggcgcg 50

gatccgcggc cggaattct aaaccaacat gccgggcacc tacgctccct 100

cgaccacact cagtagtccc agcaccagg gcctgcaaga gcaggcacgg 150

gccctgatgc gggacttccc gctcgtggac ggccacaacg acctgcccct 200

ggtcctaagg caggtttacc agaaagggct acaggatggt aacctgcgca 250

atttcagcta cggccagacc agcctggaca ggcttagaga tggcctcgtg 300

ggcgcccagt tctggtcage ctatgtgcca tgccagacc aggaccggga 350

tgccctgcgc ctcaccctgg agcagattga cctcatagc ccgcatgtgtg 400

cctcctattc tgagctggag cttgtgacct cggctaaagc tctgaacgac 450
actcagaaat tggcctgcct catcggtgta gaggggtggcc actcgctgga 500
caatagcctc tccatcttac gtaccttcta catgctggga gtgcgctacc 550
tgacgctcac ccacacctgc aacacaccct gggcagagag ctccgctaag 600
ggcgctccact ccttctacaa caacatcagc gggctgactg acttttgggtga 650
gaagggtggtg gcagaaatga accgcctggg catgatggta gacttatccc 700
atgtctcaga tgctgtggca cggcgggccc tggaagtgtc acaggcacct 750
gtgatcttct cccactcggc tgcgcggggt gtgtgcaaca gtgctcggaa 800
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tggtgtcttt gtccatggga gtaatacagt gcaaccatc agccaatgtg 900
tccactgtgg cagatcactt cgaccacatc aaggctgtca ttggatccaa 950
gttcatcggg attggtggag attatgatgg ggccggcaaa ttcctcagg 1000
ggctggaaga cgtgtccaca taccgggtcc tgatagagga gttgctgagt 1050
cgtggctgga gtgaggaaga gcttcagggt gtccttcgtg gaaacctgct 1100
gcgggtcttc agacaagtgg aaaaggtaca ggaagaaaac aaatggcaaa 1150
gccccttgga ggacaagttc ccggatgagc agctgagcag ttcctgccac 1200
tccgacctct cacgtctgcg tcagagacag agtctgactt caggccagga 1250
actcactgag attcccatac actggacagc caagttacca gccaaagtgt 1300
cagtctcaga gtccctcccc caccctgaca aaactcacac atgcccaccg 1350
tgcccagcac ctgaactcct ggggggaccg tcagtcttcc tcttcccccc 1400
aaaaccaag gacacc 1416

<210> 30
<211> 446
<212> PRT
<213> Homo Sapien

<400> 30
Met Pro Gly Thr Tyr Ala Pro Ser Thr Thr Leu Ser Ser Pro Ser
1 5 10 15
Thr Gln Gly Leu Gln Glu Gln Ala Arg Ala Leu Met Arg Asp Phe
20 25 30
Pro Leu Val Asp Gly His Asn Asp Leu Pro Leu Val Leu Arg Gln
35 40 45
Val Tyr Gln Lys Gly Leu Gln Asp Val Asn Leu Arg Asn Phe Ser

09044333 033404

	50		55		60
Tyr Gly Gln Thr Ser Leu Asp Arg Leu Arg Asp Gly Leu Val Gly	65		70		75
Ala Gln Phe Trp Ser Ala Tyr Val Pro Cys Gln Thr Gln Asp Arg	80		85		90
Asp Ala Leu Arg Leu Thr Leu Glu Gln Ile Asp Leu Ile Arg Arg	95		100		105
Met Cys Ala Ser Tyr Ser Glu Leu Glu Leu Val Thr Ser Ala Lys	110		115		120
Ala Leu Asn Asp Thr Gln Lys Leu Ala Cys Leu Ile Gly Val Glu	125		130		135
Gly Gly His Ser Leu Asp Asn Ser Leu Ser Ile Leu Arg Thr Phe	140		145		150
Tyr Met Leu Gly Val Arg Tyr Leu Thr Leu Thr His Thr Cys Asn	155		160		165
Thr Pro Trp Ala Glu Ser Ser Ala Lys Gly Val His Ser Phe Tyr	170		175		180
Asn Asn Ile Ser Gly Leu Thr Asp Phe Gly Glu Lys Val Val Ala	185		190		195
Glu Met Asn Arg Leu Gly Met Met Val Asp Leu Ser His Val Ser	200		205		210
Asp Ala Val Ala Arg Arg Ala Leu Glu Val Ser Gln Ala Pro Val	215		220		225
Ile Phe Ser His Ser Ala Ala Arg Gly Val Cys Asn Ser Ala Arg	230		235		240
Asn Val Pro Asp Asp Ile Leu Gln Leu Leu Lys Lys Asn Gly Gly	245		250		255
Val Val Met Val Ser Leu Ser Met Gly Val Ile Gln Cys Asn Pro	260		265		270
Ser Ala Asn Val Ser Thr Val Ala Asp His Phe Asp His Ile Lys	275		280		285
Ala Val Ile Gly Ser Lys Phe Ile Gly Ile Gly Gly Asp Tyr Asp	290		295		300
Gly Ala Gly Lys Phe Pro Gln Gly Leu Glu Asp Val Ser Thr Tyr	305		310		315
Pro Val Leu Ile Glu Glu Leu Leu Ser Arg Gly Trp Ser Glu Glu	320		325		330
Glu Leu Gln Gly Val Leu Arg Gly Asn Leu Leu Arg Val Phe Arg	335		340		345

Gln	Val	Glu	Lys	Val	Gln	Glu	Glu	Asn	Lys	Trp	Gln	Ser	Pro	Leu
				350					355					360
Glu	Asp	Lys	Phe	Pro	Asp	Glu	Gln	Leu	Ser	Ser	Ser	Cys	His	Ser
				365					370					375
Asp	Leu	Ser	Arg	Leu	Arg	Gln	Arg	Gln	Ser	Leu	Thr	Ser	Gly	Gln
				380					385					390
Glu	Leu	Thr	Glu	Ile	Pro	Ile	His	Trp	Thr	Ala	Lys	Leu	Pro	Ala
				395					400					405
Lys	Trp	Ser	Val	Ser	Glu	Ser	Ser	Pro	His	Pro	Asp	Lys	Thr	His
				410					415					420
Thr	Cys	Pro	Pro	Cys	Pro	Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser
				425					430					435
Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr				
				440					445					

<210> 31
 <211> 1790
 <212> DNA
 <213> Homo Sapien

<400> 31
 cgcccagcga cgtgcgggag gcctggcccc cgccctcccc cgcccggcct 50
 gcgtccccgc cctgcgcca ccgcgcgga gccgcagccc gccgcgcgcc 100
 cccggcagcg ccggccccat gccgcgcggc cgccggggcc ccgcgcgcca 150
 atccgcgcgg cggcgcgcgc cgttgctgcc cctgctgctg ctgctctgcg 200
 tcctcggggc gccgcgagcc ggatcaggag cccacacagc tgtgatcagt 250
 ccccaggatc ccacgcttct catcggtccc tccctgctgg ccacctgctc 300
 agtgcacgga gaccaccag gagccaccgc cgagggcctc tactggaccc 350
 tcaacgggag ccgcctgccc cctgagctct cccgtgtact caacgcctcc 400
 accttggtc tgccctggc caacctcaat gggccaggc agcggtcggg 450
 ggacaacctc gtgtgccacg cccgtgacgg cagcatcctg gctggctcct 500
 gcctctatgt tggcctgccc ccagagaaac ccgtcaacat cagctgctgg 550
 tccaagaaca tgaaggactt gacctgccgc tggacgccag gggcccacgg 600
 ggagacctc ctccacacca actactccct caagtacaag cttaggtggt 650
 atggccagga caacacatgt gaggagtacc acacagtggg gcccactcc 700
 tgccacatcc ccaaggacct ggctctcttt acgccctatg agatctgggt 750
 ggaggccacc aaccgctgg gctctgcccc ctccgatgta ctcacgctgg 800

atatcctgga tgtggtgacc acggaccccc cgcccgcgt gcacgtgagc 850
 cgcgctcgggg gcctggagga ccagctgagc gtgcgctggg tgcgcccacc 900
 cgccctcaag gatttctctt ttcaagccaa ataccagatc cgctaccgag 950
 tggaggacag tgtggactgg aaggtggtgg acgatgtgag caaccagacc 1000
 tcctgcgcgc tggccggcct gaaacccggc accgtgtact tcgtgcaagt 1050
 gcgctgcaac ccctttggca tctatggctc caagaaagcc gggatctgga 1100
 gtgagtggag ccaccccaca gccgcctcca ctcccgcag tgagcgcccg 1150
 ggcccggggc gcggggcggtg cgaaccgcgg ggcggagagc cgagctcggg 1200
 gccggtgcgg cgcgagctca agcagttcct gggctggctc aagaagcacg 1250
 cgtactgctc caacctcagc ttccgcctct acgaccagtg gcgagcctgg 1300
 atgcagaagt cgcacaagac ccgcaaccag gacgagggga tcctgccctc 1350
 gggcagacgg ggcacggcga gaggtcctgc cagataagct gtaggggctc 1400
 aggccaccct ccctgccacg tggagacgca gaggccgaac ccaaactggg 1450
 gccacctctg taccctcact tcagggcacc tgagccaccc tcagcaggag 1500
 ctgggggtggc ccctgagctc caacggccat aacagctctg actcccacgt 1550
 gaggccacct ttgggtgcac ccagtggtgt gtgtgtgtgt gtgtgagggt 1600
 tggttgagtt gcctagaacc cctgccaggg ctgggggtga gaaggggagt 1650
 cattactccc cattacctag ggcccctcca aaagagtcct tttaaataaa 1700
 tgagctattt aggtgctgtg attgtgaaaa aaaaaaaaaa aaaaaaaaaa 1750
 aaaaaaaaaa aaaaaaaaaa aaaaacaaaa aaaaaaaaaa 1790

<210> 32
 <211> 422
 <212> PRT
 <213> Homo Sapien

<400> 32
 Met Pro Ala Gly Arg Arg Gly Pro Ala Ala Gln Ser Ala Arg Arg
 1 5 10 15
 Pro Pro Pro Leu Leu Pro Leu Leu Leu Leu Leu Cys Val Leu Gly
 20 25 30
 Ala Pro Arg Ala Gly Ser Gly Ala His Thr Ala Val Ile Ser Pro
 35 40 45
 Gln Asp Pro Thr Leu Leu Ile Gly Ser Ser Leu Leu Ala Thr Cys
 50 55 60

Ser Val His Gly Asp Pro Pro Gly Ala Thr Ala Glu Gly Leu Tyr
 65 70 75
 Trp Thr Leu Asn Gly Arg Arg Leu Pro Pro Glu Leu Ser Arg Val
 80 85 90
 Leu Asn Ala Ser Thr Leu Ala Leu Ala Leu Ala Asn Leu Asn Gly
 95 100 105
 Ser Arg Gln Arg Ser Gly Asp Asn Leu Val Cys His Ala Arg Asp
 110 115 120
 Gly Ser Ile Leu Ala Gly Ser Cys Leu Tyr Val Gly Leu Pro Pro
 125 130 135
 Glu Lys Pro Val Asn Ile Ser Cys Trp Ser Lys Asn Met Lys Asp
 140 145 150
 Leu Thr Cys Arg Trp Thr Pro Gly Ala His Gly Glu Thr Phe Leu
 155 160 165
 His Thr Asn Tyr Ser Leu Lys Tyr Lys Leu Arg Trp Tyr Gly Gln
 170 175 180
 Asp Asn Thr Cys Glu Glu Tyr His Thr Val Gly Pro His Ser Cys
 185 190 195
 His Ile Pro Lys Asp Leu Ala Leu Phe Thr Pro Tyr Glu Ile Trp
 200 205 210
 Val Glu Ala Thr Asn Arg Leu Gly Ser Ala Arg Ser Asp Val Leu
 215 220 225
 Thr Leu Asp Ile Leu Asp Val Val Thr Thr Asp Pro Pro Pro Asp
 230 235 240
 Val His Val Ser Arg Val Gly Gly Leu Glu Asp Gln Leu Ser Val
 245 250 255
 Arg Trp Val Ser Pro Pro Ala Leu Lys Asp Phe Leu Phe Gln Ala
 260 265 270
 Lys Tyr Gln Ile Arg Tyr Arg Val Glu Asp Ser Val Asp Trp Lys
 275 280 285
 Val Val Asp Asp Val Ser Asn Gln Thr Ser Cys Arg Leu Ala Gly
 290 295 300
 Leu Lys Pro Gly Thr Val Tyr Phe Val Gln Val Arg Cys Asn Pro
 305 310 315
 Phe Gly Ile Tyr Gly Ser Lys Lys Ala Gly Ile Trp Ser Glu Trp
 320 325 330
 Ser His Pro Thr Ala Ala Ser Thr Pro Arg Ser Glu Arg Pro Gly
 335 340 345
 Pro Gly Gly Gly Ala Cys Glu Pro Arg Gly Gly Glu Pro Ser Ser

	350		355		360
Gly Pro Val Arg	Arg Glu Leu Lys Gln	Phe Leu Gly Trp Leu	Lys		
	365		370		375
Lys His Ala Tyr	Cys Ser Asn Leu Ser	Phe Arg Leu Tyr Asp	Gln		
	380		385		390
Trp Arg Ala Trp	Met Gln Lys Ser His	Lys Thr Arg Asn Gln	Asp		
	395		400		405
Glu Gly Ile Leu	Pro Ser Gly Arg Arg	Gly Thr Ala Arg Gly	Pro		
	410		415		420
Ala Arg					

<210> 33
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 33
 cccgcccgcac gtgcacgtga gcc 23

<210> 34
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 34
 tgagccagcc caggaactgc ttg 23

<210> 35
 <211> 50
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 35
 caagtgcgct gcaaccctt tggcatctat ggctccaaga aagccgggat 50

<210> 36
 <211> 1771
 <212> DNA
 <213> Homo Sapien

<400> 36
 cccacgcgtc cgctggtggt agatcgagca accctctaaa agcagtttag 50

agtggtaaaa aaaaaaaaaa acacaccaaa cgctcgacgc caaaaagg 100
 atgaaatttc ttctggacat cctcctgctt ctcccggttac tgatcgtctg 150
 ctccctagag tccttcgtga agctttttat tcctaagagg agaaaatcag 200
 tcaccggcga aatcgtgctg attacaggag ctgggcacatg aattgggaga 250
 ctgactgcct atgaatttgc taaacttaaa agcaagctgg ttctctggga 300
 tataaataag catggactgg aggaaacagc tgccaaatgc aagggactgg 350
 gtgccaaagg tcataccttt gtggtagact gcagcaaccg agaagatatt 400
 tacagctctg caaagaaggc gaaggcagaa attggagatg ttagtatatt 450
 agtaaataat gctgggtgtag tctatacatc agatttggtt gctacacaag 500
 atcctcagat tgaaaagact tttgaagtta atgtacttgc acatttctgg 550
 actacaaagg catttcttcc tgcaatgacg aagaataacc atggccatat 600
 tgtcactgtg gcttcggcag ctggacatgt ctgggtcccc ttcttactgg 650
 cttactgttc aagcaagttt gctgctgttg gatttcataa aactttgaca 700
 gatgaactgg ctgccttaca aataactgga gtcaaaacaa catgtctgtg 750
 tcctaatttc gtaaacactg gcttcatcaa aaatccaagt acaagtttgg 800
 gaccactctt ggaacctgag gaagtggtaa acaggetgat gcatgggatt 850
 ctgactgagc agaagatgat ttttattcca tcttctatag cttttttaac 900
 aacattggaa aggatccttc ctgagcgttt cctggcagtt ttaaaacgaa 950
 aaatcagtgt taagtttgat gcagttattg gatataaaat gaaagcgcaa 1000
 taagcaccta gttttctgaa aactgattta ccagggttag gttgatgtca 1050
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 cccattttct tcaatatcat ttttgaggct ttggcagctc tcatttacta 1150
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 tacctttaga ggtgacttta aggaaaatga agaaaaagaa ccaaatgac 1250
 tttattaaaa taatttccaa gattatttgt ggctcacctg aaggctttgc 1300
 aaaatttgta ccataaccgt ttatttaaca tatattttta tttttgattg 1350
 cacttaaatt ttgtataatt tgtgtttctt tttctgttct acataaaatc 1400
 agaaacttca agctctctaa ataaaatgaa ggactatata tagtgggtatt 1450
 tcacaatgaa tatcatgaac tctcaatggg taggtttcat cctacccatt 1500

gccactctgt ttctgagag atacctcaca ttccaatgcc aaacatttct 1550
gcacagggaa gctagagggtg gatacacgtg ttgcaagtat aaaagcatca 1600
ctgggattta aggagaattg agagaatgta cccacaaatg gcagcaataa 1650
taaatggatc acacttaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1700
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1750
aaaaaaaaaa aaaaaaaaaa a 1771

<210> 37
<211> 300
<212> PRT
<213> Homo Sapien

<400> 37
Met Lys Phe Leu Leu Asp Ile Leu Leu Leu Leu Pro Leu Leu Ile
1 5 10 15
Val Cys Ser Leu Glu Ser Phe Val Lys Leu Phe Ile Pro Lys Arg
20 25 30
Arg Lys Ser Val Thr Gly Glu Ile Val Leu Ile Thr Gly Ala Gly
35 40 45
His Gly Ile Gly Arg Leu Thr Ala Tyr Glu Phe Ala Lys Leu Lys
50 55 60
Ser Lys Leu Val Leu Trp Asp Ile Asn Lys His Gly Leu Glu Glu
65 70 75
Thr Ala Ala Lys Cys Lys Gly Leu Gly Ala Lys Val His Thr Phe
80 85 90
Val Val Asp Cys Ser Asn Arg Glu Asp Ile Tyr Ser Ser Ala Lys
95 100 105
Lys Val Lys Ala Glu Ile Gly Asp Val Ser Ile Leu Val Asn Asn
110 115 120
Ala Gly Val Val Tyr Thr Ser Asp Leu Phe Ala Thr Gln Asp Pro
125 130 135
Gln Ile Glu Lys Thr Phe Glu Val Asn Val Leu Ala His Phe Trp
140 145 150
Thr Thr Lys Ala Phe Leu Pro Ala Met Thr Lys Asn Asn His Gly
155 160 165
His Ile Val Thr Val Ala Ser Ala Ala Gly His Val Ser Val Pro
170 175 180
Phe Leu Leu Ala Tyr Cys Ser Ser Lys Phe Ala Ala Val Gly Phe
185 190 195
His Lys Thr Leu Thr Asp Glu Leu Ala Ala Leu Gln Ile Thr Gly

200	205	210
Val Lys Thr Thr Cys Leu Cys Pro Asn Phe	Val Asn Thr Gly Phe	
215	220	225
Ile Lys Asn Pro Ser Thr Ser Leu Gly	Pro Thr Leu Glu Pro Glu	
230	235	240
Glu Val Val Asn Arg Leu Met His Gly	Ile Leu Thr Glu Gln Lys	
245	250	255
Met Ile Phe Ile Pro Ser Ser Ile Ala	Phe Leu Thr Thr Leu Glu	
260	265	270
Arg Ile Leu Pro Glu Arg Phe Leu Ala	Val Leu Lys Arg Lys Ile	
275	280	285
Ser Val Lys Phe Asp Ala Val Ile Gly	Tyr Lys Met Lys Ala Gln	
290	295	300

<210> 38

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 38

ggtgaaggca gaaattggag atg 23

<210> 39

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 39

atcccatgca tcagcctggt tacc 24

<210> 40

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 40

gctgggtgtag tctatacatc agatttggtt gctacacaag atcctcag 48

<210> 41

<211> 1377

<212> DNA

<213> Homo Sapien

<400> 41

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gaaccaggac tggggtgacg gcagggcagg gggcgccctgg ccggggagaa 100
gcgcgggggc tggagcacca ccaactggag ggtccggagt agcgagcgcc 150
ccgaaggagg ccatcgggga gccgggaggg gggactgcga gaggaccccg 200
gcgtccgggc tcccggtgcc agcgctatga ggccactcct cgtcctgctg 250
ctcctgggccc tggcggccgg ctgcggccca ctggacgaca acaagatecc 300
cagcctctgc ccggggcacc ccggccttcc aggcacgccg ggccaccatg 350
gcagccaggg cttgccgggc cgcgatggcc gcgacggccg cgacggcgcg 400
cccggggctc cgggagagaa aggcgagggc gggaggccgg gactgccggg 450
acctcgaggg gaccccgggc cgcgaggaga ggcgggaccc gcggggccca 500
ccgggcctgc cggggagtgc tcgggtgcctc cgcgatccgc cttcagcgcc 550
aagcgctccg agagccgggt gcctccgccg tctgacgcac ccttgccctt 600
cgaccgcgtg ctgggtgaacg agcagggaca ttacgacgcc gtcaccggca 650
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gtctaccggg ccagcctgca gtttgatctg gtgaagaatg gcgaatccat 750
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caccttctcc ggatttctgg tgtactccga ctggcacagc tccccagtct 950
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gggccggccc ttttctcaga gatcactcaa taaacctag aacctcata 1350
aaaaaaaaa aaaaaaaaaa aaaaaaa 1377

<210> 42

<211> 243
 <212> PRT
 <213> Homo Sapien

<400> 42

Met	Arg	Pro	Leu	Leu	Val	Leu	Leu	Leu	Leu	Gly	Leu	Ala	Ala	Gly	1	5	10	15
Ser	Pro	Pro	Leu	Asp	Asp	Asn	Lys	Ile	Pro	Ser	Leu	Cys	Pro	Gly	20	25	30	
His	Pro	Gly	Leu	Pro	Gly	Thr	Pro	Gly	His	His	Gly	Ser	Gln	Gly	35	40	45	
Leu	Pro	Gly	Arg	Asp	Gly	Arg	Asp	Gly	Arg	Asp	Gly	Ala	Pro	Gly	50	55	60	
Ala	Pro	Gly	Glu	Lys	Gly	Glu	Gly	Gly	Arg	Pro	Gly	Leu	Pro	Gly	65	70	75	
Pro	Arg	Gly	Asp	Pro	Gly	Pro	Arg	Gly	Glu	Ala	Gly	Pro	Ala	Gly	80	85	90	
Pro	Thr	Gly	Pro	Ala	Gly	Glu	Cys	Ser	Val	Pro	Pro	Arg	Ser	Ala	95	100	105	
Phe	Ser	Ala	Lys	Arg	Ser	Glu	Ser	Arg	Val	Pro	Pro	Pro	Ser	Asp	110	115	120	
Ala	Pro	Leu	Pro	Phe	Asp	Arg	Val	Leu	Val	Asn	Glu	Gln	Gly	His	125	130	135	
Tyr	Asp	Ala	Val	Thr	Gly	Lys	Phe	Thr	Cys	Gln	Val	Pro	Gly	Val	140	145	150	
Tyr	Tyr	Phe	Ala	Val	His	Ala	Thr	Val	Tyr	Arg	Ala	Ser	Leu	Gln	155	160	165	
Phe	Asp	Leu	Val	Lys	Asn	Gly	Glu	Ser	Ile	Ala	Ser	Phe	Phe	Gln	170	175	180	
Phe	Phe	Gly	Gly	Trp	Pro	Lys	Pro	Ala	Ser	Leu	Ser	Gly	Gly	Ala	185	190	195	
Met	Val	Arg	Leu	Glu	Pro	Glu	Asp	Gln	Val	Trp	Val	Gln	Val	Gly	200	205	210	
Val	Gly	Asp	Tyr	Ile	Gly	Ile	Tyr	Ala	Ser	Ile	Lys	Thr	Asp	Ser	215	220	225	
Thr	Phe	Ser	Gly	Phe	Leu	Val	Tyr	Ser	Asp	Trp	His	Ser	Ser	Pro	230	235	240	
Val	Phe	Ala																

<210> 43
 <211> 24

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 43
 tacaggccca gtcaggacca gggg 24

 <210> 44
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 44
 agccagcctc gctctcgg 18

 <210> 45
 <211> 18
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 45
 gtctgcgatc aggtctgg 18

 <210> 46
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 46
 gaaagaggca atggattcgc 20

 <210> 47
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 47
 gacttacact tgccagcaca gcac 24

 <210> 48
 <211> 45
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 48

ggagcaccac caactggagg gtccggagta gcgagcgccc cgaag 45

<210> 49

<211> 1876

<212> DNA

<213> Homo Sapien

<400> 49

ctctttttgtc caccagccca gcctgactcc tggagattgt gaatagctcc 50
atccagcctg agaaacaagc cgggtggctg agccaggctg tgcacggagc 100
acctgacggg cccaacagac ccatgctgca tccagagacc tcccctggcc 150
gggggcatct cctggctgtg ctcttggccc tccttggcac cacctgggca 200
gaggtgtggc caccacagct gcaggagcag gctccgatgg ccggagccct 250
gaacaggaag gagagtttct tgctcctctc cctgcacaac cgcttgcgca 300
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cccgagcctg gcatccggcc tgtggcgcac cctgcaagtg ggctggaaca 450
tgcagctgct gcccgcgggc ttggcgctct ttgttgaagt ggtcagccta 500
tggtttgcag aggggcagcg gtacagccac gcggcaggag agtgtgctcg 550
caacgccacc tgcaccact acacgcagct cgtgtgggcc acctcaagcc 600
agctgggctg tgggcggcac ctgtgctctg caggccagac agcgatagaa 650
gcctttgtct gtgcctactc ccccggaggc aactgggagg tcaacgggaa 700
gacaatcacc cctataaga agggtgctg gtgttcgctc tgcacagcca 750
gtgtctcagg ctgcttcaaa gcctgggacc atgcaggggg gctctgtgag 800
gtccccagga atccttgtcg catgagctgc cagaaccatg gacgtctcaa 850
catcagcacc tgccactgcc actgtccccc tggctacacg ggcagatact 900
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gagtgtctcg gcgtctgtga catcggttac gggggagccc agtgtgccac 1000
caaggtgcat tttcccttcc acacctgtga cctgaggatc gacggagact 1050
gcttcatggg gtcttcagag gcagacacct attacagagc caggatgaaa 1100
tgtcagagga aaggcggggg gctggcccag atcaagagcc agaaagtgc 1150

ggacatectc gccttctatc tggggccgcct ggagaccacc aacgaggtga 1200
 ctgacagtga cttcgagacc aggaacttct ggatcgggct cacctacaag 1250
 accgccaagg actccttccg ctggggccaca ggggagcacc aggccttcac 1300
 cagttttgcc tttgggcagc ctgacaacca cgggctgggtg tggctgagtg 1350
 ctgccatggg gtttggcaac tgcgtggagc tgcaggcttc agctgccttc 1400
 aactggaacg accagcgctg caaaacccga aaccggttaca tctgccagtt 1450
 tgcccaggag cacatctccc ggtggggccc agggctctga ggcctgacca 1500
 catggctccc tcgcctgccc tgggagcacc ggctctgctt acctgtctgc 1550
 ccacctgtct ggaacaaggg ccaggttaag accacatgcc tcatgtccaa 1600
 agaggtctca gaccttgac aatgccagaa gttgggcaga gagaggcagg 1650
 gaggccagtg agggccaggg agtgagtgtt agaagaagct ggggcccttc 1700
 gcctgctttt gattgggaag atgggcttca attagatggc gaaggagagg 1750
 acaccgccag tgggtccaaa aggctgctct cttccacctg gccagaccc 1800
 tgtggggcag cggagcttcc ctgtggcatg aaccccacgg ggtattaaat 1850
 tatgaatcag ctgaaaaaaaa aaaaaa 1876

<210> 50
 <211> 455
 <212> PRT
 <213> Homo Sapien

<400> 50
 Met Leu His Pro Glu Thr Ser Pro Gly Arg Gly His Leu Leu Ala
 1 5 10 15
 Val Leu Leu Ala Leu Leu Gly Thr Thr Trp Ala Glu Val Trp Pro
 20 25 30
 Pro Gln Leu Gln Glu Gln Ala Pro Met Ala Gly Ala Leu Asn Arg
 35 40 45
 Lys Glu Ser Phe Leu Leu Leu Ser Leu His Asn Arg Leu Arg Ser
 50 55 60
 Trp Val Gln Pro Pro Ala Ala Asp Met Arg Arg Leu Asp Trp Ser
 65 70 75
 Asp Ser Leu Ala Gln Leu Ala Gln Ala Arg Ala Ala Leu Cys Gly
 80 85 90
 Ile Pro Thr Pro Ser Leu Ala Ser Gly Leu Trp Arg Thr Leu Gln
 95 100 105
 Val Gly Trp Asn Met Gln Leu Leu Pro Ala Gly Leu Ala Ser Phe

05944862-003404

110	115	120
Val Glu Val Val Ser Leu Trp Phe Ala	Glu Gly Gln Arg Tyr Ser	
125	130	135
His Ala Ala Gly Glu Cys Ala Arg Asn	Ala Thr Cys Thr His Tyr	
140	145	150
Thr Gln Leu Val Trp Ala Thr Ser Ser	Gln Leu Gly Cys Gly Arg	
155	160	165
His Leu Cys Ser Ala Gly Gln Thr Ala	Ile Glu Ala Phe Val Cys	
170	175	180
Ala Tyr Ser Pro Gly Gly Asn Trp Glu	Val Asn Gly Lys Thr Ile	
185	190	195
Ile Pro Tyr Lys Lys Gly Ala Trp Cys	Ser Leu Cys Thr Ala Ser	
200	205	210
Val Ser Gly Cys Phe Lys Ala Trp Asp	His Ala Gly Gly Leu Cys	
215	220	225
Glu Val Pro Arg Asn Pro Cys Arg Met	Ser Cys Gln Asn His Gly	
230	235	240
Arg Leu Asn Ile Ser Thr Cys His Cys	His Cys Pro Pro Gly Tyr	
245	250	255
Thr Gly Arg Tyr Cys Gln Val Arg Cys	Ser Leu Gln Cys Val His	
260	265	270
Gly Arg Phe Arg Glu Glu Glu Cys Ser	Cys Val Cys Asp Ile Gly	
275	280	285
Tyr Gly Gly Ala Gln Cys Ala Thr Lys	Val His Phe Pro Phe His	
290	295	300
Thr Cys Asp Leu Arg Ile Asp Gly Asp	Cys Phe Met Val Ser Ser	
305	310	315
Glu Ala Asp Thr Tyr Tyr Arg Ala Arg	Met Lys Cys Gln Arg Lys	
320	325	330
Gly Gly Val Leu Ala Gln Ile Lys Ser	Gln Lys Val Gln Asp Ile	
335	340	345
Leu Ala Phe Tyr Leu Gly Arg Leu Glu	Thr Thr Asn Glu Val Thr	
350	355	360
Asp Ser Asp Phe Glu Thr Arg Asn Phe	Trp Ile Gly Leu Thr Tyr	
365	370	375
Lys Thr Ala Lys Asp Ser Phe Arg Trp	Ala Thr Gly Glu His Gln	
380	385	390
Ala Phe Thr Ser Phe Ala Phe Gly Gln	Pro Asp Asn His Gly Leu	
395	400	405

Val	Trp	Leu	Ser	Ala	Ala	Met	Gly	Phe	Gly	Asn	Cys	Val	Glu	Leu
				410					415					420
Gln	Ala	Ser	Ala	Ala	Phe	Asn	Trp	Asn	Asp	Gln	Arg	Cys	Lys	Thr
				425					430					435
Arg	Asn	Arg	Tyr	Ile	Cys	Gln	Phe	Ala	Gln	Glu	His	Ile	Ser	Arg
				440					445					450
Trp	Gly	Pro	Gly	Ser										
				455										

<210> 51
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 51
 aggaacttct ggatcgggct cacc 24

<210> 52
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 52
 gggctctgggc caggtggaag agag 24

<210> 53
 <211> 45
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 53
 gccaaaggact ccttccgctg ggccacaggg gagcaccagg ccttc 45

<210> 54
 <211> 2331
 <212> DNA
 <213> Homo Sapien

<400> 54
 cggacgcgtg ggctgggccc tgcaaagcgt gtcccgcggg gtccccgagc 50
 gtcccgcgcc ctgccccgc catgctcctg ctgctggggc tgtgcctggg 100
 gctgtccctg tgtgtggggc cgcaggaaga ggcgcagagc tggggccact 150
 cttcggagca ggatggactc agggccccga ggcaagtcag actgttgcag 200

[illegible]

acgtggaggt caccgccagc aacagtaaga aattcatcat cctgaagaca 1700
 gatgtgcctg tgcggcctca gaaggcaggg aaagatgtca caggaagccc 1750
 caggcctgga ggcgatggag agggggacac caaccacatc gagcgtctct 1800
 ggagctacct caccacaaag gagctgctga gctcctggct gcaaagtga 1850
 gatgaaccgg agaaggagcg gctgcggcag cgggcccagg ccctggctgt 1900
 gagctaccgc ttcctcactc ccttcacctc catgaagctg agggggccgg 1950
 tcccacgcat ggatggcctg gaggaggccc acggcatgtc ggctgccatg 2000
 ggacccgaac cggtggtgca gagcgtgcga ggagctggca cgcagccagg 2050
 acctttgctc aagaagccaa actccgtcaa aaaaaaacia aaaaaaacia 2100
 aaaaaagaca tgggagagat ggtgtttttc ctctccacca cctggggata 2150
 cgatgagaag atggccacct gcaagccagg aagacggccc tcaccagaca 2200
 ccatgtctgc tggcaccttg atcttgacc tccagcctc cagaactgtg 2250
 agaaataaat gtgttttgtt taagctaaaa aaaaaaaaaa aaaaaaaaaa 2300
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 2331

<210> 55
 <211> 694
 <212> PRT
 <213> Homo Sapien

<400> 55
 Met Leu Leu Leu Leu Gly Leu Cys Leu Gly Leu Ser Leu Cys Val
 1 5 10 15
 Gly Ser Gln Glu Glu Ala Gln Ser Trp Gly His Ser Ser Glu Gln
 20 25 30
 Asp Gly Leu Arg Val Pro Arg Gln Val Arg Leu Leu Gln Arg Leu
 35 40 45
 Lys Thr Lys Pro Leu Met Thr Glu Phe Ser Val Lys Ser Thr Ile
 50 55 60
 Ile Ser Arg Tyr Ala Phe Thr Thr Val Ser Cys Arg Met Leu Asn
 65 70 75
 Arg Ala Ser Glu Asp Gln Asp Ile Glu Phe Gln Met Gln Ile Pro
 80 85 90
 Ala Ala Ala Phe Ile Thr Asn Phe Thr Met Leu Ile Gly Asp Lys
 95 100 105
 Val Tyr Gln Gly Glu Ile Thr Glu Arg Glu Lys Lys Ser Gly Asp
 110 115 120

Arg Val Lys Glu Lys Arg Asn Lys Thr Thr Glu Glu Asn Gly Glu
 125 130 135
 Lys Gly Thr Glu Ile Phe Arg Ala Ser Ala Val Ile Pro Ser Lys
 140 145 150
 Asp Lys Ala Ala Phe Phe Leu Ser Tyr Glu Glu Leu Leu Gln Arg
 155 160 165
 Arg Leu Gly Lys Tyr Glu His Ser Ile Ser Val Arg Pro Gln Gln
 170 175 180
 Leu Ser Gly Arg Leu Ser Val Asp Val Asn Ile Leu Glu Ser Ala
 185 190 195
 Gly Ile Ala Ser Leu Glu Val Leu Pro Leu His Asn Ser Arg Gln
 200 205 210
 Arg Gly Ser Gly Arg Gly Glu Asp Asp Ser Gly Pro Pro Pro Ser
 215 220 225
 Thr Val Ile Asn Gln Asn Glu Thr Phe Ala Asn Ile Ile Phe Lys
 230 235 240
 Pro Thr Val Val Gln Gln Ala Arg Ile Ala Gln Asn Gly Ile Leu
 245 250 255
 Gly Asp Phe Ile Ile Arg Tyr Asp Val Asn Arg Glu Gln Ser Ile
 260 265 270
 Gly Asp Ile Gln Val Leu Asn Gly Tyr Phe Val His Tyr Phe Ala
 275 280 285
 Pro Lys Asp Leu Pro Pro Leu Pro Lys Asn Val Val Phe Val Leu
 290 295 300
 Asp Ser Ser Ala Ser Met Val Gly Thr Lys Leu Arg Gln Thr Lys
 305 310 315
 Asp Ala Leu Phe Thr Ile Leu His Asp Leu Arg Pro Gln Asp Arg
 320 325 330
 Phe Ser Ile Ile Gly Phe Ser Asn Arg Ile Lys Val Trp Lys Asp
 335 340 345
 His Leu Ile Ser Val Thr Pro Asp Ser Ile Arg Asp Gly Lys Val
 350 355 360
 Tyr Ile His His Met Ser Pro Thr Gly Gly Thr Asp Ile Asn Gly
 365 370 375
 Ala Leu Gln Arg Ala Ile Arg Leu Leu Asn Lys Tyr Val Ala His
 380 385 390
 Ser Gly Ile Gly Asp Arg Ser Val Ser Leu Ile Val Phe Leu Thr
 395 400 405
 Asp Gly Lys Pro Thr Val Gly Glu Thr His Thr Leu Lys Ile Leu

410	415	420
Asn Asn Thr Arg Glu Ala Ala Arg Gly Gln Val Cys Ile Phe Thr		
425	430	435
Ile Gly Ile Gly Asn Asp Val Asp Phe Arg Leu Leu Glu Lys Leu		
440	445	450
Ser Leu Glu Asn Cys Gly Leu Thr Arg Arg Val His Glu Glu Glu		
455	460	465
Asp Ala Gly Ser Gln Leu Ile Gly Phe Tyr Asp Glu Ile Arg Thr		
470	475	480
Pro Leu Leu Ser Asp Ile Arg Ile Asp Tyr Pro Pro Ser Ser Val		
485	490	495
Val Gln Ala Thr Lys Thr Leu Phe Pro Asn Tyr Phe Asn Gly Ser		
500	505	510
Glu Ile Ile Ile Ala Gly Lys Leu Val Asp Arg Lys Leu Asp His		
515	520	525
Leu His Val Glu Val Thr Ala Ser Asn Ser Lys Lys Phe Ile Ile		
530	535	540
Leu Lys Thr Asp Val Pro Val Arg Pro Gln Lys Ala Gly Lys Asp		
545	550	555
Val Thr Gly Ser Pro Arg Pro Gly Gly Asp Gly Glu Gly Asp Thr		
560	565	570
Asn His Ile Glu Arg Leu Trp Ser Tyr Leu Thr Thr Lys Glu Leu		
575	580	585
Leu Ser Ser Trp Leu Gln Ser Asp Asp Glu Pro Glu Lys Glu Arg		
590	595	600
Leu Arg Gln Arg Ala Gln Ala Leu Ala Val Ser Tyr Arg Phe Leu		
605	610	615
Thr Pro Phe Thr Ser Met Lys Leu Arg Gly Pro Val Pro Arg Met		
620	625	630
Asp Gly Leu Glu Glu Ala His Gly Met Ser Ala Ala Met Gly Pro		
635	640	645
Glu Pro Val Val Gln Ser Val Arg Gly Ala Gly Thr Gln Pro Gly		
650	655	660
Pro Leu Leu Lys Lys Pro Asn Ser Val Lys Lys Lys Gln Asn Lys		
665	670	675
Thr Lys Lys Arg His Gly Arg Asp Gly Val Phe Pro Leu His His		
680	685	690
Leu Gly Ile Arg		

<210> 56
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 56
gtgggaacca aactccggca gacc 24

<210> 57
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 57
cacatcgagc gtctctgg 18

<210> 58
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 58
agccgctcct tctccggttc atcg 24

<210> 59
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 59
tggaaggacc acttgatata agtcactcca gacagcatca gggatggg 48

<210> 60
<211> 1413
<212> DNA
<213> Homo Sapien

<400> 60
cggacgcgtg ggggtgccga catggcgagt gtagtgctgc cgagcggatc 50
ccagtgtgcg gcggcagcgg cggcggcggc gcctcccggg ctccggcttc 100
tgctgttgct cttctccgcc gcggcactga tccccacagg tgatgggcag 150
aatctgttta cgaaagacgt gacagtgatc gagggagagg ttgcgaccat 200

cagttgccaa gtcaataaga gtgacgactc tgtgattcag ctactgaatc 250
 ccaacaggca gaccatttat ttcagggact tcaggccttt gaaggacagc 300
 aggttttcagt tgctgaatth ttctagcagt gaactcaaag tatcattgac 350
 aaacgtctca atttctgatg aaggaagata cttttgccag ctctataaccg 400
 atccccaca ggaaagttac accaccatca cagtcctggg cccaccacgt 450
 aatctgatga tcgatatcca gaaagacact gcgggtggaag gtgaggagat 500
 tgaagtcAAC tgcactgcta tggccagcaa gccagccacg actatcaggt 550
 ggttcaaagg gaacacagag ctaaaaggca aatcggaggt ggaagagtgg 600
 tcagacatgt aactgtgac cagtcagctg atgctgaagg tgcacaagga 650
 ggacgatggg gtcccagtga tctgccaggt ggagcaccct gcggtcactg 700
 gaaacctgca gaccagcgg tatctagaag tacagtataa gcctcaagtg 750
 cacattcaga tgacttatcc tctacaaggc ttaaccggg aaggggacgc 800
 gcttgagtta acatgtgaag ccacgggaa gcccagcct gtgatggtaa 850
 cttgggtgag agtcgatgat gaaatgctc aacacgccgt actgtctggg 900
 cccaacctgt tcatcaataa cctaaacaaa acagataatg gtacataaccg 950
 ctgtgaagct tcaaacatag tggggaaagc tctcggat tatatgctgt 1000
 atgtatacga tccccccaca actatccctc ctcccacaac aaccaccacc 1050
 accaccacca ccaccaccac caccatcctt accatcatca cagattcccc 1100
 agcaggtgaa gaaggctoga tcagggcagt ggatcatgcc gtgategggtg 1150
 gcgtcgtggc ggtgggtggg ttcgccatgc tgtgcttgct catcattctg 1200
 gggcgctatt ttgccagaca taaaggtaca tacttcaact atgaagccaa 1250
 aggagccgat gacgcagcag acgcagacac agctataatc aatgcagaag 1300
 gaggacagaa caactccgaa gaaaagaaag agtacttcat ctagatcagc 1350
 ctttttgttt caatgaggtg tccaactggc cctatttaga tgataaagag 1400
 acagtgatat tgg 1413

<210> 61
 <211> 440
 <212> PRT
 <213> Homo Sapien

<400> 61
 Met Ala Ser Val Val Leu Pro Ser Gly Ser Gln Cys Ala Ala Ala
 1 5 10 15

Ala	Ala	Ala	Ala	Ala	Pro	Pro	Gly	Leu	Arg	Leu	Leu	Leu	Leu	Leu	Leu	20	25	30
Phe	Ser	Ala	Ala	Ala	Leu	Ile	Pro	Thr	Gly	Asp	Gly	Gln	Asn	Leu		35	40	45
Phe	Thr	Lys	Asp	Val	Thr	Val	Ile	Glu	Gly	Glu	Val	Ala	Thr	Ile		50	55	60
Ser	Cys	Gln	Val	Asn	Lys	Ser	Asp	Asp	Ser	Val	Ile	Gln	Leu	Leu		65	70	75
Asn	Pro	Asn	Arg	Gln	Thr	Ile	Tyr	Phe	Arg	Asp	Phe	Arg	Pro	Leu		80	85	90
Lys	Asp	Ser	Arg	Phe	Gln	Leu	Leu	Asn	Phe	Ser	Ser	Ser	Glu	Leu		95	100	105
Lys	Val	Ser	Leu	Thr	Asn	Val	Ser	Ile	Ser	Asp	Glu	Gly	Arg	Tyr		110	115	120
Phe	Cys	Gln	Leu	Tyr	Thr	Asp	Pro	Pro	Gln	Glu	Ser	Tyr	Thr	Thr		125	130	135
Ile	Thr	Val	Leu	Val	Pro	Pro	Arg	Asn	Leu	Met	Ile	Asp	Ile	Gln		140	145	150
Lys	Asp	Thr	Ala	Val	Glu	Gly	Glu	Glu	Ile	Glu	Val	Asn	Cys	Thr		155	160	165
Ala	Met	Ala	Ser	Lys	Pro	Ala	Thr	Thr	Ile	Arg	Trp	Phe	Lys	Gly		170	175	180
Asn	Thr	Glu	Leu	Lys	Gly	Lys	Ser	Glu	Val	Glu	Glu	Trp	Ser	Asp		185	190	195
Met	Tyr	Thr	Val	Thr	Ser	Gln	Leu	Met	Leu	Lys	Val	His	Lys	Glu		200	205	210
Asp	Asp	Gly	Val	Pro	Val	Ile	Cys	Gln	Val	Glu	His	Pro	Ala	Val		215	220	225
Thr	Gly	Asn	Leu	Gln	Thr	Gln	Arg	Tyr	Leu	Glu	Val	Gln	Tyr	Lys		230	235	240
Pro	Gln	Val	His	Ile	Gln	Met	Thr	Tyr	Pro	Leu	Gln	Gly	Leu	Thr		245	250	255
Arg	Glu	Gly	Asp	Ala	Leu	Glu	Leu	Thr	Cys	Glu	Ala	Ile	Gly	Lys		260	265	270
Pro	Gln	Pro	Val	Met	Val	Thr	Trp	Val	Arg	Val	Asp	Asp	Glu	Met		275	280	285
Pro	Gln	His	Ala	Val	Leu	Ser	Gly	Pro	Asn	Leu	Phe	Ile	Asn	Asn		290	295	300
Leu	Asn	Lys	Thr	Asp	Asn	Gly	Thr	Tyr	Arg	Cys	Glu	Ala	Ser	Asn				

	305		310		315
Ile Val Gly Lys	Ala His Ser Asp Tyr	Met Leu Tyr Val Tyr	Asp		
	320	325	330		
Pro Pro Thr Thr	Ile Pro Pro Pro Thr	Thr Thr Thr Thr Thr	Thr		
	335	340	345		
Thr Thr Thr Thr	Thr Thr Ile Leu Thr	Ile Ile Thr Asp Ser	Arg		
	350	355	360		
Ala Gly Glu Glu	Gly Ser Ile Arg Ala	Val Asp His Ala Val	Ile		
	365	370	375		
Gly Gly Val Val	Ala Val Val Val Phe	Ala Met Leu Cys Leu	Leu		
	380	385	390		
Ile Ile Leu Gly	Arg Tyr Phe Ala Arg	His Lys Gly Thr Tyr	Phe		
	395	400	405		
Thr His Glu Ala	Lys Gly Ala Asp Asp	Ala Ala Asp Ala Asp	Thr		
	410	415	420		
Ala Ile Ile Asn	Ala Glu Gly Gly Gln	Asn Asn Ser Glu Glu	Lys		
	425	430	435		
Lys Glu Tyr Phe	Ile				
	440				

<210> 62
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 62
 ggcttctgct gttgctcttc tccg 24

 <210> 63
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 63
 gtacactgtg accagtcagc 20

 <210> 64
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

<400> 64
atcatcacag attcccgagc 20

<210> 65
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 65
ttcaatctcc tcaccttcca ccgc 24

<210> 66
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 66
atagctgtgt ctgcgtctgc tgcg 24

<210> 67
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 67
cgcggcactg atccccacag gtgatgggca gaatctgttt acgaaagacg 50

<210> 68
<211> 2555
<212> DNA
<213> Homo Sapien

<400> 68
ggggcgggtg gacgcggact cgaacgcagt tgcttcggga cccaggaccc 50
cctcgggccc gacccgccag gaaagactga ggccgcggcc tgccccgccc 100
ggctccctgc gccgcgcgcg cctcccggga cagaagatgt gctccagggt 150
ccctctgctg ctgccgctgc tcctgtact ggccctgggg cctgggggtgc 200
agggtgccc atccggctgc cagtgcagcc agccacagac agtcttctgc 250
actgccccgc aggggaccac ggtgccccga gacgtgccac ccgacacggt 300
ggggctgtac gtctttgaga acggcatcac catgctcgac gcaagcagct 350
ttgccggcct gccgggcctg cagctcctgg acctgtcaca gaaccagatc 400

gccagcctgc gcctgccccg cctgctgctg ctggacctca gccacaacag 450
cctcctggcc ctggagcccc gcctcctgga cactgccaac gtggaggcgc 500
tgcggetggc tgggtctgggg ctgcagcagc tggacgaggg gctcttcagc 550
cgcttgcgca acctccacga cctggatgtg tccgacaacc agctggagcg 600
agtgccacct gtgatccgag gcctccgggg cctgacgcgc ctgcggctgg 650
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tggcgacctc tcgggcctct tccccgcct gcggctgctg gcagctgccc 800
gcaaccctt caactgcgtg tgccccctga gctgggtttg cccttgggtg 850
cgcgagagcc acgtcacact ggccagccct gaggagacgc gctgccactt 900
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ttactccgtc tgtgtcatgc ctttggggcc cgggcgggtg ccggaggggc 1550
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caggtggggc caggggctgg gcccctggaa ctggaggggag tgaaggctcc 1800
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gcgggtctga gtgtgaggtg ccactcatgg gcttcccagg gcctggcctc 1900
 cagtcacccc tccacgcaaa gccctacatc taagccagag agagacaggg 1950
 cagctggggc cgggctctca gccagtgaga tggccagccc cctcctgctg 2000
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 tctgtgagat gctgtggccc agctgacgag cctaacgtc cccagaaccg 2150
 agtgcctatg aggacagtgt cggccctgcc ctccgcaacg tgcagtcctt 2200
 gggcacggcg ggccctgcca tgtgctggta acgcatgcct gggccctgct 2250
 gggctctccc actccaggcg gacctggggg gccagtgaag gaagctcccg 2300
 gaaagagcag agggagagcg ggtaggcggc tgtgtgactc tagtcttggc 2350
 cccaggaagc gaaggaacaa aagaaactgg aaaggaagat gctttaggaa 2400
 catgttttgc ttttttaaaa tatatatata tttataagag atcctttccc 2450
 atttattctg ggaagatggt tttcaaactc agagacaagg actttggttt 2500
 ttgtaagaca aacgatgata tgaaggcctt ttgtaagaaa aaataaaaaa 2550
 aaaaa 2555

<210> 69
 <211> 598
 <212> PRT
 <213> Homo Sapien

<400> 69
 Met Cys Ser Arg Val Pro Leu Leu Leu Pro Leu Leu Leu Leu Leu
 1 5 10 15
 Ala Leu Gly Pro Gly Val Gln Gly Cys Pro Ser Gly Cys Gln Cys
 20 25 30
 Ser Gln Pro Gln Thr Val Phe Cys Thr Ala Arg Gln Gly Thr Thr
 35 40 45
 Val Pro Arg Asp Val Pro Pro Asp Thr Val Gly Leu Tyr Val Phe
 50 55 60
 Glu Asn Gly Ile Thr Met Leu Asp Ala Ser Ser Phe Ala Gly Leu
 65 70 75
 Pro Gly Leu Gln Leu Leu Asp Leu Ser Gln Asn Gln Ile Ala Ser
 80 85 90
 Leu Arg Leu Pro Arg Leu Leu Leu Leu Asp Leu Ser His Asn Ser
 95 100 105
 Leu Leu Ala Leu Glu Pro Gly Ile Leu Asp Thr Ala Asn Val Glu

Gln Arg Tyr Leu Gln Gly Ser Ser Val	Gln Leu Arg Ser Leu Arg
410	415 420
Leu Thr Tyr Arg Asn Leu Ser Gly Pro Asp Lys Arg Leu Val Thr	
425	430 435
Leu Arg Leu Pro Ala Ser Leu Ala Glu Tyr Thr Val Thr Gln Leu	
440	445 450
Arg Pro Asn Ala Thr Tyr Ser Val Cys Val Met Pro Leu Gly Pro	
455	460 465
Gly Arg Val Pro Glu Gly Glu Glu Ala Cys Gly Glu Ala His Thr	
470	475 480
Pro Pro Ala Val His Ser Asn His Ala Pro Val Thr Gln Ala Arg	
485	490 495
Glu Gly Asn Leu Pro Leu Leu Ile Ala Pro Ala Leu Ala Ala Val	
500	505 510
Leu Leu Ala Ala Leu Ala Ala Val Gly Ala Ala Tyr Cys Val Arg	
515	520 525
Arg Gly Arg Ala Met Ala Ala Ala Ala Gln Asp Lys Gly Gln Val	
530	535 540
Gly Pro Gly Ala Gly Pro Leu Glu Leu Glu Gly Val Lys Val Pro	
545	550 555
Leu Glu Pro Gly Pro Lys Ala Thr Glu Gly Gly Gly Glu Ala Leu	
560	565 570
Pro Ser Gly Ser Glu Cys Glu Val Pro Leu Met Gly Phe Pro Gly	
575	580 585
Pro Gly Leu Gln Ser Pro Leu His Ala Lys Pro Tyr Ile	
590	595

<210> 70

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 70

ccctccactg cccacccgac tg 22

<210> 71

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 71
cggttctggg gacgttaggg ctcg 24

<210> 72
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 72
ctgcccaccg tccacctgcc tcaat 25

<210> 73
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 73
aggactgcc accgtccacc tgcctcaatg ggggcacatg ccacc 45

<210> 74
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 74
acgcaaagcc ctacatctaa gccagagaga gacagggcag ctggg 45

<210> 75
<211> 1077
<212> DNA
<213> Homo Sapien

<400> 75
ggcactagga caaccttctt cccttctgca ccaactgcccg taccettacc 50
cgccccgcca cctccttgct acccactct tgaaaccaca gctgttgga 100
gggtccccag ctcatgccag cctcatctcc tttcttgcta gccccaaag 150
ggcctccagg caacatgggg ggcccagtc gagagccggc actctcagtt 200
gccctctggt tgagttgggg ggcagctctg ggggcccgtg cttgtgccat 250
ggctctgctg acccaacaaa cagagctgca ggcctcagg agagaggtga 300
gccggctgca ggggacagga ggcccctccc agaatgggga agggatatccc 350
tggcagagtc tcccggagca gagttccgat gccctggaag cctgggagaa 400

tggggagaga tcccggaaaa ggagagcagt gctcacccaa aaacagaaga 450
 agcagcactc tgtcctgcac ctggttccca ttaacgccac ctccaaggat 500
 gactccgatg tgacagaggt gatgtggcaa ccagctctta ggcgtgggag 550
 aggcctacag gcccaaggat atggtgtccg aatccaggat gctggagttt 600
 atctgctgta tagccaggtc ctgtttcaag acgtgacttt caccatgggt 650
 caggtgggtgt ctcgagaagg ccaaggaagg caggagactc tattccgatg 700
 tataagaagt atgccctccc acccggaccg ggcctacaac agctgctata 750
 gcgcaggtgt cttccattta caccaagggg atattctgag tgtcataatt 800
 ccccgggcaa gggcgaaact taacctctct ccacatggaa ccttcctggg 850
 gtttgtgaaa ctgtgattgt gttataaaaa gtggctccca gcttggaaga 900
 ccagggtggg tacatactgg agacagccaa gagctgagta tataaaggag 950
 agggaatgtg caggaacaga ggcattcttc tgggtttggc tccccgttcc 1000
 tcacttttcc cttttcattc ccacccccta gactttgatt ttacggatat 1050
 cttgcttctg ttccccatgg agctccg 1077

<210> 76
 <211> 250
 <212> PRT
 <213> Homo Sapien

<400> 76
 Met Pro Ala Ser Ser Pro Phe Leu Leu Ala Pro Lys Gly Pro Pro
 1 5 10 15
 Gly Asn Met Gly Gly Pro Val Arg Glu Pro Ala Leu Ser Val Ala
 20 25 30
 Leu Trp Leu Ser Trp Gly Ala Ala Leu Gly Ala Val Ala Cys Ala
 35 40 45
 Met Ala Leu Leu Thr Gln Gln Thr Glu Leu Gln Ser Leu Arg Arg
 50 55 60
 Glu Val Ser Arg Leu Gln Gly Thr Gly Gly Pro Ser Gln Asn Gly
 65 70 75
 Glu Gly Tyr Pro Trp Gln Ser Leu Pro Glu Gln Ser Ser Asp Ala
 80 85 90
 Leu Glu Ala Trp Glu Asn Gly Glu Arg Ser Arg Lys Arg Arg Ala
 95 100 105
 Val Leu Thr Gln Lys Gln Lys Lys Gln His Ser Val Leu His Leu
 110 115 120

Val	Pro	Ile	Asn	Ala	Thr	Ser	Lys	Asp	Asp	Ser	Asp	Val	Thr	Glu
				125					130					135
Val	Met	Trp	Gln	Pro	Ala	Leu	Arg	Arg	Gly	Arg	Gly	Leu	Gln	Ala
				140					145					150
Gln	Gly	Tyr	Gly	Val	Arg	Ile	Gln	Asp	Ala	Gly	Val	Tyr	Leu	Leu
				155					160					165
Tyr	Ser	Gln	Val	Leu	Phe	Gln	Asp	Val	Thr	Phe	Thr	Met	Gly	Gln
				170					175					180
Val	Val	Ser	Arg	Glu	Gly	Gln	Gly	Arg	Gln	Glu	Thr	Leu	Phe	Arg
				185					190					195
Cys	Ile	Arg	Ser	Met	Pro	Ser	His	Pro	Asp	Arg	Ala	Tyr	Asn	Ser
				200					205					210
Cys	Tyr	Ser	Ala	Gly	Val	Phe	His	Leu	His	Gln	Gly	Asp	Ile	Leu
				215					220					225
Ser	Val	Ile	Ile	Pro	Arg	Ala	Arg	Ala	Lys	Leu	Asn	Leu	Ser	Pro
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His	Gly	Thr	Phe	Leu	Gly	Phe	Val	Lys	Leu					
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 <211> 2849
 <212> DNA
 <213> Homo Sapien

<400> 77
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094450-03401

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<210> 78

<211> 281

<212> PRT

<213> Homo Sapien

<400> 78

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				20					25					30
Gln	Gly	Glu	Gln	Gln	Glu	Trp	Glu	Gly	Thr	Glu	Glu	Leu	Pro	Ser
				35					40					45
Pro	Pro	Asp	His	Ala	Glu	Arg	Ala	Glu	Glu	Gln	His	Glu	Lys	Tyr
				50					55					60
Arg	Pro	Ser	Gln	Asp	Gln	Gly	Leu	Pro	Ala	Ser	Arg	Cys	Leu	Arg
				65					70					75
Cys	Cys	Asp	Pro	Gly	Thr	Ser	Met	Tyr	Pro	Ala	Thr	Ala	Val	Pro
				80					85					90
Gln	Ile	Asn	Ile	Thr	Ile	Leu	Lys	Gly	Glu	Lys	Gly	Asp	Arg	Gly
				95					100					105
Asp	Arg	Gly	Leu	Gln	Gly	Lys	Tyr	Gly	Lys	Thr	Gly	Ser	Ala	Gly

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Ala Arg Gly His Thr Gly Pro Lys Gly Gln Lys Gly Ser Met Gly		
125	130	135
Ala Pro Gly Glu Arg Cys Lys Ser His Tyr Ala Ala Phe Ser Val		
140	145	150
Gly Arg Lys Lys Pro Met His Ser Asn His Tyr Tyr Gln Thr Val		
155	160	165
Ile Phe Asp Thr Glu Phe Val Asn Leu Tyr Asp His Phe Asn Met		
170	175	180
Phe Thr Gly Lys Phe Tyr Cys Tyr Val Pro Gly Leu Tyr Phe Phe		
185	190	195
Ser Leu Asn Val His Thr Trp Asn Gln Lys Glu Thr Tyr Leu His		
200	205	210
Ile Met Lys Asn Glu Glu Glu Val Val Ile Leu Phe Ala Gln Val		
215	220	225
Gly Asp Arg Ser Ile Met Gln Ser Gln Ser Leu Met Leu Glu Leu		
230	235	240
Arg Glu Gln Asp Gln Val Trp Val Arg Leu Tyr Lys Gly Glu Arg		
245	250	255
Glu Asn Ala Ile Phe Ser Glu Glu Leu Asp Thr Tyr Ile Thr Phe		
260	265	270
Ser Gly Tyr Leu Val Lys His Ala Thr Glu Pro		
275	280	

<210> 79

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 79

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<210> 80

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 80

ctgaagaagt agaggccggg cacg 24

<210> 81

<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 81
cccgggtgctt gcgctgctgt gaccccggtta cctccatgta cccgg 45

<210> 82
<211> 2284
<212> DNA
<213> Homo Sapien

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ggcgccgggg tcctctcgac gccagagaga aatctcatca tctgtgcagc 150
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<210> 83
<211> 431
<212> PRT
<213> Homo Sapien
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Lys	Lys	Ser	Leu	Glu	Asp	Val	Val	Ile	Asp	Ile	Gln	Ser	Ser	Leu	
				35					40					45	
Ser	Lys	Gly	Ile	Arg	Gly	Asn	Glu	Pro	Val	Tyr	Thr	Ser	Thr	Gln	
				50					55					60	
Glu	Asp	Cys	Ile	Asn	Ser	Cys	Cys	Ser	Thr	Lys	Asn	Ile	Ser	Gly	
				65					70					75	
Asp	Lys	Ala	Cys	Asn	Leu	Met	Ile	Phe	Asp	Thr	Arg	Lys	Thr	Ala	
				80					85					90	
Arg	Gln	Pro	Asn	Cys	Tyr	Leu	Phe	Phe	Cys	Pro	Asn	Glu	Glu	Ala	
				95					100					105	
Cys	Pro	Leu	Lys	Pro	Ala	Lys	Gly	Leu	Met	Ser	Tyr	Arg	Ile	Ile	
				110					115					120	
Thr	Asp	Phe	Pro	Ser	Leu	Thr	Arg	Asn	Leu	Pro	Ser	Gln	Glu	Leu	
				125					130					135	
Pro	Gln	Glu	Asp	Ser	Leu	Leu	His	Gly	Gln	Phe	Ser	Gln	Ala	Val	
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Thr	Pro	Leu	Ala	His	His	His	Thr	Asp	Tyr	Ser	Lys	Pro	Thr	Asp	
				155					160					165	
Ile	Ser	Trp	Arg	Asp	Thr	Leu	Ser	Gln	Lys	Phe	Gly	Ser	Ser	Asp	
				170					175					180	
His	Leu	Glu	Lys	Leu	Phe	Lys	Met	Asp	Glu	Ala	Ser	Ala	Gln	Leu	
				185					190					195	
Leu	Ala	Tyr	Lys	Glu	Lys	Gly	His	Ser	Gln	Ser	Ser	Gln	Phe	Ser	
				200					205					210	
Ser	Asp	Gln	Glu	Ile	Ala	His	Leu	Leu	Pro	Glu	Asn	Val	Ser	Ala	
				215					220					225	
Leu	Pro	Ala	Thr	Val	Ala	Val	Ala	Ser	Pro	His	Thr	Thr	Ser	Ala	
				230					235					240	
Thr	Pro	Lys	Pro	Ala	Thr	Leu	Leu	Pro	Thr	Asn	Ala	Ser	Val	Thr	
				245					250					255	
Pro	Ser	Gly	Thr	Ser	Gln	Pro	Gln	Leu	Ala	Thr	Thr	Ala	Pro	Pro	
				260					265					270	
Val	Thr	Thr	Val	Thr	Ser	Gln	Pro	Pro	Thr	Thr	Leu	Ile	Ser	Thr	
				275					280					285	
Val	Phe	Thr	Arg	Ala	Ala	Ala	Thr	Leu	Gln	Ala	Met	Ala	Thr	Thr	
				290					295					300	
Ala	Val	Leu	Thr	Thr	Thr	Phe	Gln	Ala	Pro	Thr	Asp	Ser	Lys	Gly	

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Ser Leu Glu Thr Ile Pro Phe Thr Glu Ile Ser Asn Leu Thr Leu		
320	325	330
Asn Thr Gly Asn Val Tyr Asn Pro Thr Ala Leu Ser Met Ser Asn		
335	340	345
Val Glu Ser Ser Thr Met Asn Lys Thr Ala Ser Trp Glu Gly Arg		
350	355	360
Glu Ala Ser Pro Gly Ser Ser Ser Gln Gly Ser Val Pro Glu Asn		
365	370	375
Gln Tyr Gly Leu Pro Phe Glu Lys Trp Leu Leu Ile Gly Ser Leu		
380	385	390
Leu Phe Gly Val Leu Phe Leu Val Ile Gly Leu Val Leu Leu Gly		
395	400	405
Arg Ile Leu Ser Glu Ser Leu Arg Arg Lys Arg Tyr Ser Arg Leu		
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Asp Tyr Leu Ile Asn Gly Ile Tyr Val Asp Ile		
425	430	

<210> 84
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 84
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<210> 85
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 85
 gaagcaagtg cccagctc 18

<210> 86
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 86
 cgggtccctg ctcttttg 18

<210> 87
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 87
caccgtagct gggagcgcac tcac 24

<210> 88
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 88
agtgttaagtc aagctccc 18

<210> 89
<211> 49
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 89
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<210> 90
<211> 957
<212> DNA
<213> Homo Sapien

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<210> 91
 <211> 235
 <212> PRT
 <213> Homo Sapien

<400> 91
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 35 40 45
 Ser Ile Gly Glu Arg Pro Val Leu Lys Ala Pro Val Pro Lys Arg
 50 55 60
 Gln Lys Cys Asp His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala
 65 70 75
 Tyr Arg Leu Leu Ser Gly Gly Gly Arg Ser Lys Tyr Ala Lys Ile
 80 85 90
 Cys Phe Glu Asp Asn Leu Leu Met Gly Glu Gln Leu Gly Asn Val
 95 100 105
 Ala Arg Gly Ile Asn Ile Ala Ile Val Asn Tyr Val Thr Gly Asn
 110 115 120
 Val Thr Ala Thr Arg Cys Phe Asp Met Tyr Glu Gly Asp Asn Ser
 125 130 135
 Gly Pro Met Thr Lys Phe Ile Gln Ser Ala Ala Pro Lys Ser Leu
 140 145 150
 Leu Phe Met Val Thr Tyr Asp Asp Gly Ser Thr Arg Leu Asn Asn
 155 160 165

Asp	Ala	Lys	Asn	Ala	Ile	Glu	Ala	Leu	Gly	Ser	Lys	Glu	Ile	Arg
			170						175					180
Asn	Met	Lys	Phe	Arg	Ser	Ser	Trp	Val	Phe	Ile	Ala	Ala	Lys	Gly
			185						190					195
Leu	Glu	Leu	Pro	Ser	Glu	Ile	Gln	Arg	Glu	Lys	Ile	Asn	His	Ser
			200						205					210
Asp	Ala	Lys	Asn	Asn	Arg	Tyr	Ser	Gly	Trp	Pro	Ala	Glu	Ile	Gln
			215						220					225
Ile	Glu	Gly	Cys	Ile	Pro	Lys	Glu	Arg	Ser					
			230						235					

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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

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<210> 93
 <211> 18
 <212> DNA
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<220>
 <223> Synthetic oligonucleotide probe

<400> 93
 aggcttggaa ctcccttc 18

<210> 94
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
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<400> 94
 aagattcttg agcgattcca gctg 24

<210> 95
 <211> 47
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide probe

<400> 95
 aatccctgct cttcatgggtg acctatgacg acggaagcac aagactg 47

<210> 96
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 96
 ctcaagaagc acgcgtactg c 21

 <210> 97
 <211> 25
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 97
 ccaacctcag cttccgcctc tacga 25

 <210> 98
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 <212> DNA
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 <220>
 <223> Synthetic oligonucleotide probe

 <400> 98
 catccaggct cgccactg 18

 <210> 99
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 99
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 <210> 100
 <211> 25
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide probe

 <400> 100
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 <210> 101
 <211> 19
 <212> DNA

<213> Artificial Sequence

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<223> Synthetic oligonucleotide probe

<400> 101

gggcagaaat ccagccact 19

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<212> DNA

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<210> 105

<211> 21

<212> DNA

<213> Artificial Sequence

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<223> Synthetic oligonucleotide probe

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cctcggtctc ctcactgtg a 21

<210> 106

<211> 20

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<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 106

tggcccagct gacgagccct 20

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